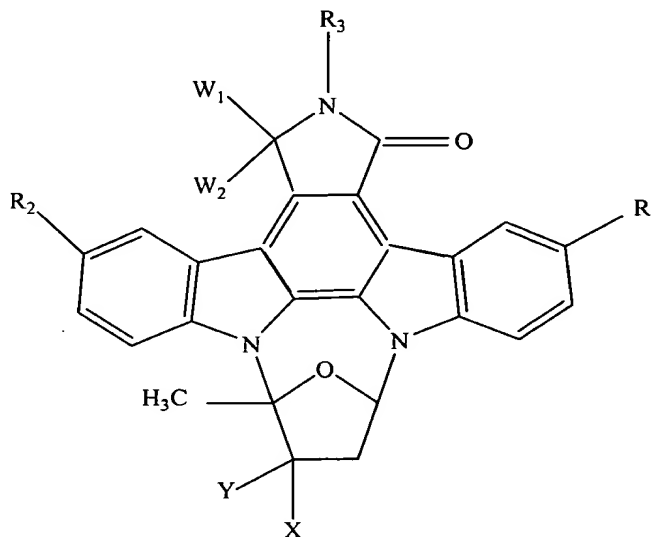


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (*currently amended*) A compound ~~defined by the general of~~ formula (I):



wherein:

one of R^1 and R^2 is selected from the group consisting of:

a) $-\text{CO}(\text{CH}_2)_j\text{R}^4$, wherein j is 1 to 6, and R^4 is selected from the group consisting of:

1) ~~hydrogen and a~~ halogen;

2) $-\text{NR}^5\text{R}^6$, wherein R^5 and R^6 independently are hydrogen, substituted lower alkyl, unsubstituted lower alkyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted heteroaryl, substituted aralkyl, unsubstituted aralkyl, lower alkylaminocarbonyl, or lower alkoxy carbonyl; or R^5 and R^6 are combined with ~~a~~ the nitrogen atom to which they are attached to form a heterocyclic group;

3) N_3 ;

4) $-\text{SR}^{27}$, wherein R^{27} is selected from the group consisting of:

i) hydrogen;

ii) substituted lower alkyl;

- iii) unsubstituted lower alkyl;
- iv) substituted aryl;
- v) unsubstituted aryl;
- vi) substituted heteroaryl;
- vii) unsubstituted heteroaryl;
- viii) substituted aralkyl;
- ix) unsubstituted aralkyl;
- x) thiazolinyl;
- xi) $-(CH_2)_aCO_2R^{28}$, wherein a is 1 or 2, and R^{28} is selected

from the group consisting of: hydrogen and lower alkyl; and

- xii) $-(CH_2)_aCONR^5R^6$; and

5) OR^{29} (wherein R^{29} is hydrogen, substituted lower alkyl, unsubstituted lower alkyl, or CO_2R^{30} (wherein R^{30} is hydrogen, lower alkyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, or unsubstituted heteroaryl));

b) $-CH(OH)(CH_2)_bR^{4A}$, wherein b is 1 to 6 and R^{4A} is hydrogen or the same as R^4 ;

c) $-(CH_2)_dCHR^{31}CO_2R^{32}$, wherein d is 0 to 5, R^{31} is hydrogen, $-CONR^5R^6$, or CO_2R^{33} (wherein R^{33} is hydrogen or lower alkyl), and R^{32} is hydrogen or lower alkyl;

d) $-(CH_2)_dCHR^{31}CONR^5R^6$;

e) $-(CH_2)_kR^7$, wherein k is 2 to 6, and R^7 is halogen, CO_2R^8 (wherein R^8 is hydrogen, lower alkyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, or unsubstituted heteroaryl), $CONR^5R^6$, substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted heteroaryl, OR^9 (wherein R^9 is hydrogen, substituted lower alkyl, unsubstituted lower alkyl, acyl, substituted aryl, or unsubstituted aryl), SR^{27B} (wherein R^{27B} is the same as R^{27}), $NR^{10}R^{11}$ (wherein R^{10} and R^{11} are the same as R^5 and R^6) or N_3 ;

f) $-CH=CH(CH_2)_mR^{12}$ wherein m is 0 to 4, and R^{12} is hydrogen, lower alkyl, CO_2R^{8A} (wherein R^{8A} is the same as R^8), $-CONR^5R^6$, substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted heteroaryl, OR^{9A} (wherein R^{9A} is the same as R^9), or $NR^{10A}R^{11A}$ (wherein R^{10A} and R^{11A} are the same as R^5 and R^6);

g) $-CH-C(CO_2R^{33A})_2$, wherein R^{33A} is the same as R^{33} ;

h) $-C\equiv C(CH_2)_nR^{13}$, wherein n is 0 to 4, and R^{13} is the same as R^{12} ;

- i) $-\text{CH}_2\text{OR}^{44}$, wherein R^{44} is substituted lower alkyl;
and the other of R^1 or R^2 is selected from the group consisting of
- j) hydrogen, lower alkyl, halogen, acyl, nitro, $\text{NR}^{14}\text{R}^{15}$ (wherein R^{14} or R^{15} is hydrogen or lower alkyl, and the other is hydrogen, lower alkyl, acyl, carbamoyl, lower alkylaminocarbonyl, substituted arylaminocarbonyl or unsubstituted arylaminocarbonyl);
- k) $-\text{CH}(\text{SR}^{34})_2$, wherein R^{34} is lower alkyl or alkylene;
- l) $-\text{CH}_2\text{R}^{35}$, wherein R^{35} is OR^{36} (wherein R^{36} is tri-lower alkyl silyl in which the three lower alkyl groups are the same or different, or is the same as R^{29}), or SR^{37} (wherein R^{37} is the same as R^{27});
- m) $-\text{CO}(\text{CH}_2)_q\text{R}^{16}$, wherein q is 1 to 6, and R^{16} is the same as R^4 ;
- n) $-\text{CH}(\text{OH})(\text{CH}_2)_e\text{R}^{38}$, wherein e is 1 to 6, and R^{38} is the same as R^{4A} ;
- o) $-(\text{CH}_2)_f\text{CHR}^{39}\text{CO}_2\text{R}^{40}$, wherein f is 0 to 5, R^{39} is the same as R^{31} and R^{40} is the same as R^{32} ;
- p) $-(\text{CH}_2)_r\text{R}^{17}$, wherein r is 2 to 6, and R^{17} is the same as R^7 ;
- q) $-\text{CH}=\text{CH}(\text{CH}_2)_t\text{R}^{18}$, wherein t is 0 to 4, and R^{18} is the same as R^{12} ;
- r) $-\text{CH}=\text{C}(\text{CO}_2\text{R}^{33B})_2$, wherein R^{33B} is the same as R^{33} ;
- s) $-\text{C}\equiv\text{C}(\text{CH}_2)_u\text{R}^{19}$, wherein u is 0 to 4, and R^{19} is the same as R^{13} ;

R^3 is hydrogen, acyl, or lower alkyl;

X is selected from the group consisting of:

- a) hydrogen;
- b) formyl;
- c) lower alkoxy carbonyl;
- d) $-\text{CONR}^{20}\text{R}^{21}$, wherein:
 R^{20} and R^{21} independently are:

hydrogen;

lower alkyl;

$-\text{CH}_2\text{R}^{22}$, wherein R^{22} is hydroxy, or

$-\text{NR}^{23}\text{R}^{24}$ (wherein R^{23} or R^{24} is hydrogen or lower alkyl, and

the other is hydrogen, lower alkyl, or the residue of an α -amino acid in which the hydroxy group of the carboxyl group is excluded, or R^{23} and R^{24} are combined with **a the** nitrogen atom **to which they are attached** to form a heterocyclic group); and

e) $-\text{CH}=\text{N}-\text{R}^{25}$, wherein R^{25} is hydroxy, lower alkoxy, amino, guanidino, or imidazolylamino;

Y is hydroxy, lower alkoxy, aralkyloxy, or acyloxy; or

X and Y combined represent, $-\text{X}-\text{Y}-$, $=\text{O}$, $-\text{CH}_2\text{O}(\text{C}=\text{O})\text{O}-$, $-\text{CH}_2\text{OC}(=\text{S})\text{O}-$, $-\text{CH}_2\text{NR}^{26}\text{C}(=\text{O})-$ (wherein R^{26} is hydrogen or lower alkyl), $-\text{CH}_2\text{NHC}(=\text{S})\text{O}-$, $-\text{CH}_2\text{OS}(=\text{O})\text{O}-$, or $-\text{CH}_2\text{OC}(\text{CH}_3)_2\text{O}-$; and

W^1 and W^2 are hydrogen, or W^1 and W^2 together represent oxygen;
or a pharmaceutically acceptable salt thereof.

2. (*original*) The compound of claim 1 wherein:

A2 a) one of R^1 and R^2 is selected from the group consisting of $-(\text{CH}_2)_k\text{R}^7$, $-\text{CH}=\text{CH}(\text{CH}_2)_m\text{R}^{12}$, $-\text{C}\equiv\text{C}(\text{CH}_2)_n\text{R}^{13}$, $-\text{CO}(\text{CH}_2)_j\text{SR}^{27}$ and $-\text{CH}_2\text{OR}^{44}$, wherein R^{44} is methoxymethyl, ethoxymethyl, or methoxyethyl;

and the other of R^1 and R^2 is selected from the group consisting of $-(\text{CH}_2)_r\text{R}^{17}$, $-\text{CH}=\text{CH}(\text{CH}_2)_i\text{R}^{18}$, $-\text{C}=\text{C}(\text{CH}_2)_u\text{R}^{19}$, $\text{NR}^{14}\text{R}^{15}$, hydrogen, halogen, nitro, $-\text{CH}_2\text{O}$, substituted lower alkyl, unsubstituted lower alkyl, $-\text{CO}(\text{CH}_2)_q\text{SR}^{27}$, $-\text{CH}_2\text{R}^{35}$, wherein R^{35} is OR^{36} , and $-\text{CH}_2\text{SR}^{37}$, wherein R^{37} is selected from the group consisting of lower alkyl, pyridyl, and benzimidazole;

b) k and r are each 2, 3, or 4;

c) j and q are each 1 or 2;

d) R^7 and R^{17} are:

1) selected independently from the group consisting of: phenyl, pyridyl, imidazolyl, thiazolyl, or tetrazolyl; or

2) selected pairwise, from the group consisting of:

i) $-\text{CO}_2\text{R}^8$ and CO_2R^{8A} , where R^8 and R^{8A} , independently, are hydrogen, methyl, ethyl, or phenyl;

ii) $-\text{OR}^9$ and $-\text{OR}^{9A}$, where R^9 and R^{9A} , independently, are hydrogen, methyl, ethyl, phenyl, or acyl;

iii) $-\text{SR}^{27B}$, where R^{27B} is selected from the group consisting of unsubstituted lower alkyl, 2-thiazoline, and pyridyl; and

iv) $-\text{NR}^{10}\text{R}^{11}$ and $-\text{NR}^{14}\text{R}^{15}$, where R^{10} , R^{11} , R^{14} , and R^{15} ,

independently, are selected from the group consisting of hydrogen, methyl, ethyl, phenyl, carbamoyl, and lower alkylaminocarbonyl;

e) R^{27} is selected from the group consisting of substituted lower alkyl, unsubstituted lower alkyl, substituted phenyl, unsubstituted phenyl, pyridyl, pyrimidinyl, thiazole, and tetrazole;

f) R^{36} is selected from the group consisting of methoxymethyl, ethoxymethyl, and methoxyethyl;

g) m, n, t and u each is 0 or 1; and

h) R^{12} , R^{13} , R^{18} , and R^{19} are independently selected from the group consisting of hydrogen, methyl ethyl, phenyl, pyridyl, imidazole, thiazole, tetrazole, $-\text{CO}_2R^8$, $-\text{OR}^9$, and $\text{NR}^{10}R^{11}$, wherein R^8 , R^9 , R^{10} , and R^{11} each is hydrogen, methyl, ethyl, or phenyl.

3. *(original)* The compound of claim 2, wherein R^3 is hydrogen or acetyl, X is hydroxymethyl or lower alkoxy carbonyl, Y is hydroxy or acetyloxy, and W^1 and W^2 are hydrogen.

4. *(original)* The compound of claim 3, wherein X is methoxycarbonyl, Y is hydroxy, and R^3 is hydrogen.

5. *(currently amended)* The compound of claim 3 wherein:

one of R^1 and R^2 is selected from the group consisting of methoxycarbonylvinyl, ethoxycarbonylvinyl, styryl, 2-pyridylvinyl, 4-pyridylvinyl, 2-pyridylethyl, 4-pyridylethyl, phenylethyl, methoxypropynyl, hydroxypropynyl, $-\text{COCH}_2\text{SEt}$, $-\text{C}\equiv\text{CCH}_2\text{NMeBn}$, $-\text{CH}=\text{CH}\text{Et}$, $-(\text{CH}_2)_2\text{SMe}$, $-(\text{CH}_2)_2\text{S-2-thiazoline}$, $-(\text{CH}_2)_3\text{SMe}$, ~~$-\text{CH}=\text{CH}\text{Et}$~~ , $-\text{CH}=\text{CH-2-imidazole}$, $(\text{CH}_2)_2\text{OC(=O)H}$, methoxymethoxymethyl, ethoxymethoxymethyl, methoxyethoxymethyl, and 2-hydroxyethyl; and

the other of R^1 and R^2 is selected from the group consisting of hydrogen, halogen, methoxycarbonylvinyl, ethoxycarbonylvinyl, styryl, 2-pyridylvinyl, 4-pyridylvinyl, 2-pyridylethyl, 4-pyridylethyl, phenylethyl, nitro, amino, N-ethylurea, methoxypropynyl, hydroxypropynyl, $-\text{COCH}_2\text{SEt}$, $-\text{C}\equiv\text{CCH}_2\text{NMeBn}$, $-\text{CH}=\text{CH}\text{Et}$, $-(\text{CH}_2)_2\text{SMe}$, $-(\text{CH}_2)_2\text{S-2-thiazoline}$, $-(\text{CH}_2)_3\text{SMe}$, $-\text{CH}_2\text{OMe}$, $-\text{CH}_2\text{OEt}$, $-\text{CH}_2\text{SEt}$, pyridylthiomethyl,

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PATENT

AD -CH₂S-2-benzimidazole, -CH=CHEt, -CH=CH-2-imidazole, -(CH₂)₂OC(=O)H,
methoxymethoxymethyl, ethoxymethoxymethyl, methoxyethoxymethyl, and 2-hydroxyethyl.

Claims 6-22 (*canceled*)
